

Analytical Data Sheet

Lot number **1076036**
not for drug use

Catalog number **B-1320.0005**
Product number **4004498.0005**
Product **Fmoc- D- Glu(OtBu) - OH · H₂O**
Molecular formula **C₂₄H₂₇NO₆ · H₂O**
Relative molecular mass **443.50**

Tests	Results								
Appearance	white powder								
Appearance of solution	clear, colorless solution (50 mg/ml in methanol) clear, slightly yellow solution (0.5 mmol/mL in DMF)								
Identification (elemental analysis)	<table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 65.0%</td> <td>C = 64.9%</td> </tr> <tr> <td>H = 6.6%</td> <td>H = 6.6%</td> </tr> <tr> <td>N = 3.2%</td> <td>N = 3.1%</td> </tr> </tbody> </table> calc. x H ₂ O (4.1%)	Theory	Found	C = 65.0%	C = 64.9%	H = 6.6%	H = 6.6%	N = 3.2%	N = 3.1%
Theory	Found								
C = 65.0%	C = 64.9%								
H = 6.6%	H = 6.6%								
N = 3.2%	N = 3.1%								
Identification (TLC)	complies with authentic material								
Melting point	93 °C								
Specific optical rotation	$[\alpha]_D^{24} = +17.8^\circ$ (1% in DMF)								
Purity (HPLC)	99.7% (TFA)								
Related impurities (HPLC)	not det. Fmoc-β-Ala-OH not det. Fmoc-β-Ala-D-Glu(OtBu)-OH < 0.1% Fmoc-D-Glu-OH < 0.1% Fmoc-D-Glu-OtBu not det. Fmoc-D-Glu(OtBu)-D-Glu(OtBu)-OH								
Purity (TLC)	> 99%								
Related impurities (TLC)	< 0.2% H-D-Glu(OtBu)-OH								
TLC conditions	chloroform/methanol/toluene/H ₂ O 8/8/8/1 toluene/dioxane/acetic acid 95/25/4 chloroform/methanol/acetic acid 90/8/2 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, IRH								
Enantiomer content (chiral chromatography)	< 0.3% L-enantiomer								
Assay (titration)	99.8% (TBAH)								

Water content (KF volumetric)	4.1%
Acetic acid content (IC)	0.0022%

Latest update: March 21, 2018

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